

**MEMORANDUM OF AGREEMENT
CONCERNING THE UPPER COLORADO RIVER BASIN FUND**

This Memorandum of Agreement (MOA) is entered into effective as of Jan. 24, 2011, by and among the States of Colorado, New Mexico, Utah and Wyoming; the Colorado River Energy Distributors Association, Inc. (CREDA); the Department of the Interior, Bureau of Reclamation; and the Department of Energy, Western Area Power Administration (the "Parties").

RECITALS

The Recitals set forth below are material facts that are relevant to and form the basis for the agreement set forth herein.

I. Parties.

Title 43, section 620d(e) of the United States Code requires approval of a state's "legally constituted authority" before that state may waive its right to have its Upper Colorado River Basin Fund apportionment spent in another state.

A. State of Colorado.

1. Pursuant to the executive authority of the Governor of the state of Colorado as delegated by letter dated October 27, 2010, the Director of the Colorado Water Conservation Board, Jennifer L. Gimbel, is authorized to negotiate and enter into this agreement.
2. Section 37-60-106, subsections (e), (h), (i), and (k) of the Colorado Revised Statutes empowers and charges the Colorado Water Conservation Board "[t]o cooperate with the United States and the agencies thereof, and with other states for the purpose of bringing about the greater utilization of the water of the state of Colorado...; ... [t]o investigate and assist in formulating a response to the plans, purposes, procedures, requirements, laws, proposed laws, or other activities of the federal government and other states which affect or might affect the use or development of the water resources of this state; [t]o confer with and appear before the officers, representatives, boards, bureaus, committees, commissions, or other agencies of other states, or of the federal government, for the purpose of protecting and asserting the authority, interests, and rights of the state of Colorado and its citizens with respect to the waters of the interstate streams in this state; ...[and] [i]n general, to take such action and have such powers as are incidental to the foregoing specific provisions and to the general purposes of this article."

- B. State of New Mexico.** Pursuant to § 72-14-3 New Mexico Statutes Annotated 1978, the New Mexico Interstate Stream Commission is authorized to investigate water supply, to develop, to conserve, to protect and to do any and all other things necessary to protect, conserve and develop the waters and stream systems of the State of New Mexico, interstate or otherwise. The Interstate Stream Commission also is authorized to institute or cause to be instituted in the name of the State of New Mexico any and all negotiations and/or legal proceedings as in its judgment are necessary to fulfill its statutory mandate.

By Resolution dated December 20, 2010, the Interstate Stream Commission authorizes the execution of this MOA and delegates its authority to the Secretary of the Interstate Stream Commission to sign on the Commission's behalf.

- C. State of Utah. The Division of Water Resources (DWR) is the water resource authority for the State of Utah. Utah Code Ann. § 73-10-18. The Utah Department of Natural Resources Executive Director (Department), with the concurrence of the Utah Board of Water Resources (Board), appoints the DWR Director (Director). § 63-34-6(1). The Board makes DWR policy. § 73-10-1.5. The Board develops, conserves, protects and controls Utah waters, § 73-10-4(4), (5), and, in cooperation with the Department and the Governor, supervises administration of interstate compacts, § 73-10-4, such as the Colorado River Compact, §§ 73-12a-1 through 3, and the Upper Colorado River Basin Compact, § 73-13-10. The Board, with Department and Gubernatorial approval, appoints a Utah Interstate Stream Commissioner, § 73-10-3, currently the DWR Director, to represent Utah in interstate conferences to administer interstate compacts. §§ 73-10-3 and 73-10-4. These delegations of authority authorize the Utah Interstate Stream Commissioner/DWR Director to sign this document. He acts pursuant to a Board resolution, acknowledged by the Department, dated December 9, 2010.
- D. State of Wyoming. The governor's discretion under Wyo. Stat. Ann. § 9-1-210 (2010) to accept federal assistance on behalf of the State of Wyoming authorizes him to be Wyoming's legally constituted authority with regard to the Basin Fund and this Agreement. In signing this agreement, the Governor of Wyoming intends that this Agreement be mutually and equally binding between the parties.
- E. Colorado River Energy Distributors Association, Inc. (CREDA). CREDA is a non-profit Colorado corporation established in 1978 to represent its members in dealing with Colorado River Storage Project (CRSP) resource availability and affordability issues. CREDA represents its members in dealing with the Bureau of Reclamation and the Western Area Power Administration. CREDA's members are all non-profit organizations, serving over four million electric consumers in the six western states of Arizona, Colorado, Nevada, New Mexico, Utah, and Wyoming. The Executive Director of CREDA is authorized to execute this MOA pursuant to resolution adopted by the CREDA Board of Directors on November 5, 2010.
- F. U.S. Department of the Interior, Bureau of Reclamation (Reclamation). Reclamation, through authorities provided to the Secretary of the Interior by Reclamation law including the Colorado River Storage Project (CRSP) Act of 1956 and subsequent amendments, is authorized to operate and maintain CRSP and participating project facilities.
- G. U.S. Department of Energy, Western Area Power Administration (Western). Western, pursuant to the Acts of Congress approved June 17, 1902 (32 Stat. 388); February 25, 1905 (33 Stat. 814); July 3, 1952 (66 Stat. 325); April 11, 1956 (70 Stat. 105); August 4, 1977 (91 Stat. 565); and the Acts amendatory or supplementary to the foregoing Acts, acting by and through the Colorado River Storage Project Manager, is authorized to execute this MOA.

II. Background.

- A. In 1956, Congress enacted the Colorado River Storage Project Act (CRSPA). Among the purposes of CRSPA is the "comprehensive development of the water resources of the Upper Colorado River Basin." A feature of CRSPA, in section 5(e), is the use of hydroelectric power revenues to aid in the development and repayment of certain irrigation costs of participating projects within the Upper Colorado River Basin (aid-to-irrigation) 43 U.S.C. § 620d(e).
- B. In section 5(e) of CRSPA, Congress apportioned funds for aid-to-irrigation repayment to each of the Upper Division States as follows: 46.0% to the State of Colorado; 21.5% to the State of Utah; 17.0% to the State of New Mexico; and 15.5% to the State of Wyoming. For a variety of reasons, the application of this apportionment is resulting in the collection of revenues for aid-to-irrigation beyond what is necessary to repay the irrigation components of the completed and under construction irrigation projects as authorized in section 5(d)(4), 43 U.S.C. § 620d(d)(4).
- C. Section 5(e) of CRSPA allows an Upper Division State to consent to the use of revenues collected pursuant to 5(e) to be used in another Upper Division State.
- D. CREDA and the Upper Division States of Colorado, New Mexico, Utah, and Wyoming desire to enter into this interim agreement to implement Section 5(e) of CRSPA in a manner that reduces the CRSP firm electric service rate.
- E. The Parties desire to enter into this interim agreement to provide additional resources to further the purposes currently authorized in CRSPA 43 U.S.C. § 620(c)(1).
- F. This MOA does not imply support for or require the de-authorization of projects that are currently authorized. It does not prevent the states or parties within the states from seeking authorization of additional projects or from seeking appropriations for authorized projects under CRSPA, as amended and supplemented. It does not require cost sharing or matching funds by the state parties.
- G. It is the intent of the signatories not to seek any legislative changes to the apportionment process as it is currently described in CRSPA.

III. Purposes. The Parties intend that the actions by them contemplated in this MOA will:

- A. Reduce the impact on the CRSP firm power rate by eliminating the collection of power revenues beyond that amount needed to repay the costs of the projects identified in A.1-6 of the Agreement section below.
- B. Create a methodology for collecting MOA Revenues for use by Reclamation within the Upper Colorado River Basin for the benefit of the Upper Division States. Under this MOA, CRSP power revenues collected in accordance with this MOA will be used by Reclamation to further the purposes of CRSPA through application of those revenues to the costs of implementation of projects recommended by the Non-Federal Parties. The

Non-Federal Parties may adopt operating procedures to more fully explain the Parties' actions pursuant to the MOA.

C. Further the cooperative relationships among CRSP water and power beneficiaries.

DEFINITIONS

For the purposes of this Agreement, the following terms are defined as follows:

1. MOA Revenues. Power revenues collected pursuant to this MOA and CRSPA, as amended and supplemented, that are utilized by Reclamation for the purposes described in section B of this MOA.
2. Colorado River Storage Project. A Bureau of Reclamation project that includes four initial storage units: Glen Canyon, Flaming Gorge, Navajo, and the Wayne N. Aspinall Storage Unit. Authorized along with, but not part of the initial units listed above, are a number of participating projects whose irrigation construction costs are repaid by power revenues. These participating projects are listed in the authorization paragraphs of the Colorado River Storage Project Act and subsequent legislation, identified in this MOA as CRSP or CRSPA.
3. Colorado River Storage Project Act. Public Law 485, approved by the President of the United States on April 11, 1956, codified at 43 U.S.C. § 620 et seq., as amended and supplemented, identified in this MOA as CRSPA.
4. Cost Recovery Charge (CRC). An additional charge that may be imposed by Western on all delivered sustainable hydropower energy deliveries that may, at times, be applicable when cost recovery is at risk due to low hydropower generation and high power prices.¹ A CRC is imposed when necessary to adequately maintain a sufficient cash balance in the Upper Colorado River Basin Fund.² On an annual basis, Western estimates availability of revenue in the Basin Fund, at the beginning and end of the fiscal year, to maintain a Basin Fund target balance for the following year, and to limit the annual loss to the Basin Fund. Once Western determines the amount of revenue available in the Basin Fund for anticipated expenses, it will determine if additional revenue is needed and will include this amount in the customer's firm power bill through the assessment of a CRC.³
5. Federal Parties. The U. S. Department of the Interior, Bureau of Reclamation and the U. S. Department of Energy, Western Area Power Administration.
6. Interim Period. The period between the date on which the last Party executes this MOA and September 30, 2025.
7. Non-Federal Parties. The States of Colorado, New Mexico, Utah, and Wyoming and CREDA.

¹ Rate Order WAPA-117, January 18, 2005.

² Rate Order WAPA-137, September 4, 2008.

³ Rate Order WAPA-117, August 15, 2005.

8. Upper Colorado River Basin. Those parts of the States of Colorado, New Mexico, Utah, and Wyoming within and from which waters naturally drain into the Colorado River system above Lee Ferry, and also all parts of said States located without the drainage area of the Colorado River system which are now or shall hereafter be beneficially served by waters diverted from the system above Lee Ferry.
9. Upper Colorado River Basin Fund (Basin Fund). A separate fund in the United States Treasury established pursuant to Section 5(a) of CRSPA 43 U.S.C. §620(d)(a).
10. Upper Colorado River Commission. An interstate water administrative agency composed of one Commissioner representing each of the States of Colorado, New Mexico, Utah, and Wyoming and one Commissioner representing the United States as established pursuant to Article VIII of the Upper Colorado River Basin Compact of 1948, 63 Stat. 31.
11. Upper Division States. The States of Colorado, New Mexico, Utah, and Wyoming as defined in Article II(c) of the Colorado River Compact and Article II(c) of the Upper Colorado River Basin Compact.

AGREEMENT

In consideration of the above recitals and the mutual covenants contained herein, and other good and valuable consideration, the receipt and sufficiency of which is hereby acknowledged, the Parties agree as follows:

A. Consent to Collection and Use of Apportioned Revenues Pursuant to Section 5(e) of CRSPA.

The Upper Division States consent pursuant to section 5(e) of CRSPA to the use of sufficient revenues apportioned and collected for each State to be used in another State for the repayment of projects as set forth below. The repayment figures included in this section of the MOA are based on Western's most recent power repayment study (Appendix B) which will be updated periodically.

The Parties intend that, as to the specifically enumerated projects below, the obligation to collect funds pursuant to section 5(e) of CRSPA will be met and at no time in the future will Reclamation or Western collect additional funds or include in the power repayment study any specified apportionment for the six projects listed below, beyond what is reflected in Western's most current power repayment study (Appendix B) for the particular project listed below when the project becomes due and payable.

1. Western will collect sufficient power revenues under CRSPA section 5(e) so that a total of approximately \$8,660,000 is collected for the Vernal Unit of the Central Utah Project in Utah for irrigation repayment in 2016.
2. Western will collect sufficient power revenues under CRSPA section 5(e) so that approximately \$3,194,000 is collected for the Smith Fork Project in Colorado for irrigation repayment, and approximately \$1,192,000 is collected for the Seedskadee Project in Wyoming for irrigation repayment in 2017.

3. Western will collect sufficient power revenues under CRSPA section 5(e) so that a total of approximately \$6,412,000 is collected for the Emery County Project in Utah for irrigation repayment in 2020.
4. Western will collect sufficient power revenues under CRSPA section 5(e) so that a total of approximately \$13,624,000 is collected for the Silt and Florida Projects in Colorado for irrigation repayment in 2021.
5. Western will collect sufficient power revenues under CRSPA section 5(e) so that a total of approximately \$23,666,000 is collected for the San Juan-Chama Project in New Mexico for irrigation repayment in 2023.
6. Western will collect sufficient power revenues under CRSPA section 5(e) so that a total of approximately \$99,070,000 is collected for the Duchesne Unit of the Central Utah Project in Utah for irrigation repayment in 2025.

B. Agreement For Collection and Use of MOA Revenues Pursuant to Section 5(c) of CRSPA, as Amended and Supplemented.

1. Collection and Use of MOA Revenues.

- a. By executing this MOA, the Parties agree to support the collection of an average of \$11,500,000 in revenues annually for a total of \$161,000,000 beginning in the federal fiscal year following approval of this MOA and continuing through the Interim Period. The MOA Revenues collected pursuant to this section B shall be assigned to projects within each of the four Upper Division States as follows: Colorado, 46.0%; New Mexico, 17.0%; Utah, 21.5%; and Wyoming, 15.5%; provided, however, that nothing herein shall prevent any state that otherwise lacks projects that qualify for MOA Revenues to allow, at the sole discretion of the state, its assigned MOA Revenues to be reallocated for implementing projects in other states. All MOA Revenues collected pursuant to this Section B shall be used in accordance with Section B of this MOA to the extent authorized by federal law.
- b. The collection of such MOA Revenues is subject to there being sufficient amounts in the Upper Colorado River Basin Fund such that a Cost Recovery Charge (CRC) will not be triggered. In the event a CRC is triggered by this MOA or any other cause through September 30 prior to October 1, 2023, the MOA Revenues associated with that year(s) not already obligated pursuant to contract will not be available for use in the year(s) a CRC is triggered, but will be made available within the next two years following a CRC-triggered year in which a CRC is triggered. It is the express intent of the Parties that while CRC triggers may affect funding availability for future projects, they will not affect the completion of projects for which studies have been completed and work has been initiated, even if additional contracting is necessary for such a project in the year(s) following a triggering of a CRC. By mutual agreement,

the Parties may adjust the schedule for collection of MOA Revenues; however, the total amount of MOA Revenues collected over the Interim Period shall be \$161,000,000, which is an average of \$11,500,000 per year. The Non-Federal Parties shall establish a schedule of MOA Revenues expected to be needed each year, taking into consideration, among other things, impacts to the most recent power repayment study. Any adjustments to the schedule for collection of MOA Revenues will be transmitted to Reclamation before the beginning of the next fiscal year.

- c. MOA Revenues collected pursuant to this subsection shall be separately accounted for in the Basin Fund by Western to fund approved projects identified by the Non-Federal Parties pursuant to this MOA and consistent with Reclamation law including CRSPA, as amended and supplemented.
 - d. Reclamation will utilize the MOA Revenues provided hereunder to fund projects or activities within the Upper Colorado River Basin, which further the purposes of CRSPA, as amended and supplemented, are within Reclamation's authorities, and are recommended by the Non-Federal Parties. Reclamation will not transfer or reassign revenues provided under this MOA to projects or activities not recommended by the Non-Federal Parties.
 - e. The Non-Federal Parties agree to support congressional budget authority, to the extent it is needed, to ensure that Reclamation has the necessary budget authority to utilize the MOA Revenues.
2. Determination of Projects and Priorities for MOA Revenues.
- a. The Non-Federal Parties shall, on a not less than annual basis, meet to discuss and make recommendations for scheduling projects and activities that would be funded by MOA Revenues. In scheduling projects for work, annual allocations of MOA Revenues may, for efficiency and by mutual consent of the Upper Division States, vary from the distribution of MOA revenue assignments described in section B.1.a of this MOA; provided, however, that the total amount of MOA Revenues over the term of this MOA shall be distributed to the states in conformance with the assignment percentages described in section B.1.a. Projects recommended for funding using MOA Revenues will include the estimated cost, anticipated commencement of construction or implementation and a timetable for completion of each project or activity.
 - b. It is the responsibility of each Upper Division State to determine the priority of projects within that state. Projects may proceed within any state, according to its priority list, if MOA Revenues are available and as the projects are scheduled for work pursuant to 2.a. above, regardless of the status of projects in any other state. Examples of projects are shown in Appendix A, which is subject to revision.
 - c. The Non-Federal Parties shall transmit a prioritized list of recommended projects to Reclamation along with any comments.

- d. CREDA will give the Upper Division States the opportunity to participate in the review and comment on Reclamation's OM&R work plans submitted to CREDA under Letter Agreement No. 92-SLC-0208, dated September 24, 1992.
- e. Upon request by an Upper Division State, Reclamation will provide technical and administrative support to identify and implement expanded operation, maintenance and replacement activities, including water conservation projects or activities, that would qualify for use of MOA Revenues under this Agreement. Such support will include conducting appraisal-level studies and cost estimates for potential activities and projects that may qualify for funding with MOA Revenues, in addition to performing final project design and implementation or construction management for projects recommended by the Non-Federal Parties for funding with MOA Revenues. The costs to Reclamation of performing these services and related environmental compliance activities shall be paid from MOA Revenues assigned or otherwise allocated to the state(s) in which the project is located.
- f. Western will update the power repayment study and complete a power rate adjustment process, if and when necessary, to implement the provisions of this MOA in a timely manner.

C. General Provisions.

- 1. Consistency with Existing Law. This MOA has been developed to be consistent with existing law, including the Upper Colorado River Basin Compact and CRSPA, as amended and supplemented.
- 2. Resolution of Claims or Controversies. In the event any dispute or controversy arises out of or relates to this MOA, the Parties agree to exercise their best efforts to resolve the dispute as soon as possible. The Parties shall, without delay, continue to perform their respective obligations under this MOA that are not affected by the dispute.
- 3. Reservation of Rights. Notwithstanding the terms of this MOA, the Parties reserve, and shall not be deemed to have waived, any and all rights, including any claims or defenses, they may have as of the date hereof or as may accrue during the term hereof, under any existing federal or state law or administrative rule, regulation or guideline, as applicable, including without limitation the Upper Colorado River Basin Compact, CRSPA, as amended and supplemented and any other applicable provision of federal law, rule, regulation or guideline. Notwithstanding anything in this MOA to the contrary, the terms of this paragraph shall survive the termination or expiration of this MOA.
- 4. No Third-Party Beneficiaries. This MOA is made for the benefit of the Parties. No Party to this MOA intends for this MOA to confer any benefit upon any person or entity not a signatory upon a theory of third-party beneficiary or otherwise.
- 5. Joint Defense Against Third-Party Claims. The Parties will have certain common, closely parallel, or identical interests in supporting, preserving and defending the MOA. The nature of this interest and the relationship among the Parties present common legal and factual issues and a mutuality of interests. Because of these common interests, the

Parties will mutually benefit from an exchange of information relating to the support, preservation and defense of this MOA, as well as from a coordinated investigation and preparation for discussion of such interests. In furtherance thereof, in the event of any challenge to the MOA by a third party, the Parties will cooperate to proceed with reasonable diligence and to use reasonable best efforts in the support, preservation and defense thereof, including any lawsuit or administrative proceeding challenging the legality, validity or enforceability of any term of this MOA, and will to the extent appropriate and allowable under federal law enter into such agreements, including joint defense or common interest agreements, as are necessary. Each Party shall bear its own costs of participation and representation in any such defense.

6. Reaffirmation of Existing Law. Nothing in this MOA is intended to, nor shall this MOA be construed so as to, diminish or modify the right of any Party under existing law, including without limitation the Upper Colorado River Basin Compact and CRSPA, as amended and supplemented. The Parties hereby affirm the entitlement and right of the Upper Division States under such existing law to fully use and develop the waters of the Colorado River apportioned to them.
7. Effective Date and Term. This MOA shall be effective as of the date of the last signature hereto. This MOA will be effective for the Interim Period from the date of its full execution by the Parties. The Parties will commence a review of this MOA for consideration of modification, extension or termination no later than September 30, 2023. The MOA shall expire on September 30, 2025 unless modified or extended. Any MOA Revenues remaining on September 30, 2025 will continue to be available to fund projects identified by the Non-Federal Parties until September 30, 2030.
8. Authority. Each person executing this MOA represents its respective Party in the matters addressed in this MOA and has the full power and authority to bind the respective Party to the terms of the MOA. No Party shall challenge the authority of any person or Party to execute this MOA and bind such Party to the terms hereof, and the Parties hereby waive the right to challenge such authority.

D. Legal Authorities.

1. The purpose of the CRSPA includes in Section 1 "the comprehensive development of the water resources of the Upper Colorado River Basin."
2. Section 5(c) of the CRSPA states "all revenues collected in connection with the operation of the Colorado River Storage Project and participating projects shall be credited to the Basin Fund and shall be available, without further appropriation" as specified in Section 5(c).
3. Section 5(e) of the CRSPA states: "Revenues so apportioned to each State shall be used only for the repayment of construction costs of participating projects or parts of such projects in the State to which such revenues are apportioned and shall not be used for such purposes in any other state without consent, as expressed through its legally constituted authority, of the State to which such revenues are apportioned."

4. Section 5(g) of the CRSPA requires that "business-type budgets shall be submitted to Congress for all operations financed by the Basin Fund."

E. Points of Contact.

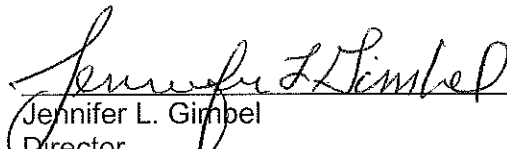
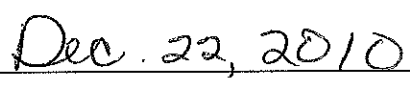
The points of contact for each of the Parties to this MOA are as follows:

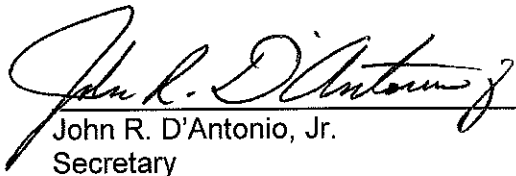
1. Upper Division States: Upper Colorado River Commissioners for the States of Colorado, New Mexico, Utah, and Wyoming; and Executive Director and General Counsel of the Upper Colorado River Commission.
2. CREDA: Executive Director.
3. Bureau of Reclamation: Regional Director, Upper Colorado Region.
4. Western Area Power Administration: Manager, CRSP Management Center.

Each Party may revise its point of contact upon written notice to each other Party.

F. Signatures.

IN WITNESS WHEREOF, the parties to this Agreement have caused their names to be affixed hereto by their proper officers on the dates indicated.

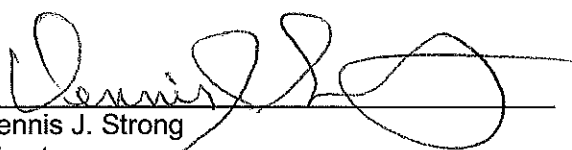
	
Jennifer L. Gimbel	Date
Director	
Colorado Water Conservation Board	




John R. D'Antonio, Jr.
Secretary
New Mexico Interstate Stream Commission

12/21/10

Date

 1/10/11
Dennis J. Strong Date
Director
Utah Division of Water Resources
Utah Department of Natural Resources

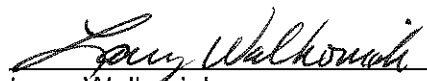


Matthew H. Mead
Governor
State of Wyoming

1/24/11

Date

Leslie James 12/22/10
Leslie James Date
Executive Director
Colorado River Energy Distributors Association



Larry Walkowiak
Regional Director, Upper Colorado Region
Bureau of Reclamation

12/23/2010

Date

Julia L. Kykiss
Julia L. Kykiss
Colorado River Storage Project Manager
Western Area Power Administration

Dec. 22, 2010
Date

APPENDIX A

The following are examples of activities that could be funded by MOA Revenues provided pursuant to this MOA. The list is not meant to be exhaustive, as projects and activities may change over time. The list applies only to the use of MOA Revenues. The use of Basin Fund revenues for these activities will be limited to the availability of MOA revenues as defined herein and is not intended to set a precedent for the use of Basin Funds in general. All projects must be approved by Reclamation in accordance with this MOA to ensure consistency in the application of Basin Fund revenues. The process for review will include asking the following: (1) Does the proposed project fall under a listed activity? (2) Does the proposed project have a link to the O&MR of Initial Units or Participating Projects? (3) What is the purpose of the proposed project? (4) Is it a viable project (provides efficiencies, cost savings or improvement)?

The following is a list of activities with some examples that will be considered for use of MOA revenues:

1. Replacements, Additions and Extraordinary Maintenance
 - Activities for the continued operation and maintenance of the Initial Units and participating projects.
 - For example, the stilling basin at Fontenelle needs repairing, and it has not been funded in the baseline funding.
 - CRRS Modeling
 - Snowpack data collection
 - Repair, refurbish and rehabilitate existing facilities
2. Water Conservation Activities
 - Activities that improve the efficiency and operation of CRSP Initial Units and participating projects. This activity needs to be separated into Federal and Non-Federal facilities, since there is a Reclamation-wide ceiling for Non-Federal grants.
 - For example, Reclamation could complete the placement of riprap on the upstream face of Fontenelle Dam.
 - Conserve reservoir storage
 - Water quality
 - Refurbishments
 - Lining of canals and laterals
 - Flow gaging/water monitoring
 - Water administration costs
 - Studies to define and develop water conservation projects
3. Environmental Compliance Activities
 - Costs of environmental compliance for CRSP initial units, including biological opinions or programmatic biological opinions and associated improvements that are necessary to satisfy compliance for continuation of operation of facilities.
 - For example, the biological opinion covering the Aspinall Unit will likely necessitate extensive funding within the Gunnison River Basin to reduce selenium concentrations in the Gunnison River.
 - Funding for improvements to support environmental compliance could be

applied to improvements on CRSP participating projects or other Reclamation projects, e.g., lining of canals, diversion structure improvements, efficiency improvements on pumping plants, or the construction of fish passage structures or temperature control structures. RIP costs

4. Stream Gaging
 - Installation and operation of gages necessary for the operation of CRSP Units.
For example, expand USGS gaging sites and the SNOTEL network.
5. Consumptive Use and Quality of Water
 - Studies necessary and incident to more efficient present and future operation of the CRSP system.
For example, Consumptive Uses and Losses studies, Quality of Water Studies, CRSS model development, climate change modeling, and reservoir water quality modeling and basin studies.
6. Salinity – Upper Colorado River Basin
 - Provides new, cost-effective opportunities to control salinity in the basin.
7. Global Climate Change
 - Provides for nationwide data collection and monitoring activities; relevant research; and activities to increase the efficiency of the use of water in the United States.
 - Reclamation also has a responsibility to take a lead role in assessing risks to the water resources of the United State and to develop strategies to mitigate impacts and ensure long-term water resources management.

APPENDIX B **Colorado River Storage Project** **Aid to Participating Projects Irrigation Repayment Obligations and Apportioned Revenues Applied** **FY 2018 PPS** **LYC 3.1.000**

Year	Colorado 45%				New Mexico 17%				Utah 21.5%				Wyoming 15.5%				Total			
	Intermediate Obligation	Intermediate Available	Intermediate W/Aggr	Intermediate W/Aggr	Intermediate Obligation	Intermediate Available	Intermediate W/Aggr	Intermediate W/Aggr	Intermediate Obligation	Intermediate Available	Intermediate W/Aggr	Intermediate W/Aggr	Intermediate Obligation	Intermediate Available	Intermediate W/Aggr	Intermediate W/Aggr	Intermediate Obligation	Intermediate Available	Intermediate W/Aggr	Intermediate W/Aggr
2015	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2016	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2017	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2018	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2019	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2020	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2021	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2022	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2023	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2024	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2025	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2026	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2027	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2028	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2029	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2030	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2031	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2032	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2033	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2034	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2035	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2036	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2037	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2038	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2039	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2040	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2041	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2042	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2043	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2044	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2045	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2046	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2047	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2048	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2049	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2050	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2051	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2052	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2053	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2054	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2055	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2056	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2057	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2058	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2059	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2060	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Total	384,471	-	-	-	54,825	-	-	-	444,774	-	-	-	47,458	-	-	-	248,811	-	-	-

Note: Bowed yellow amounts trigger apportionment. Bowed green amounts indicate total available with apportionment.